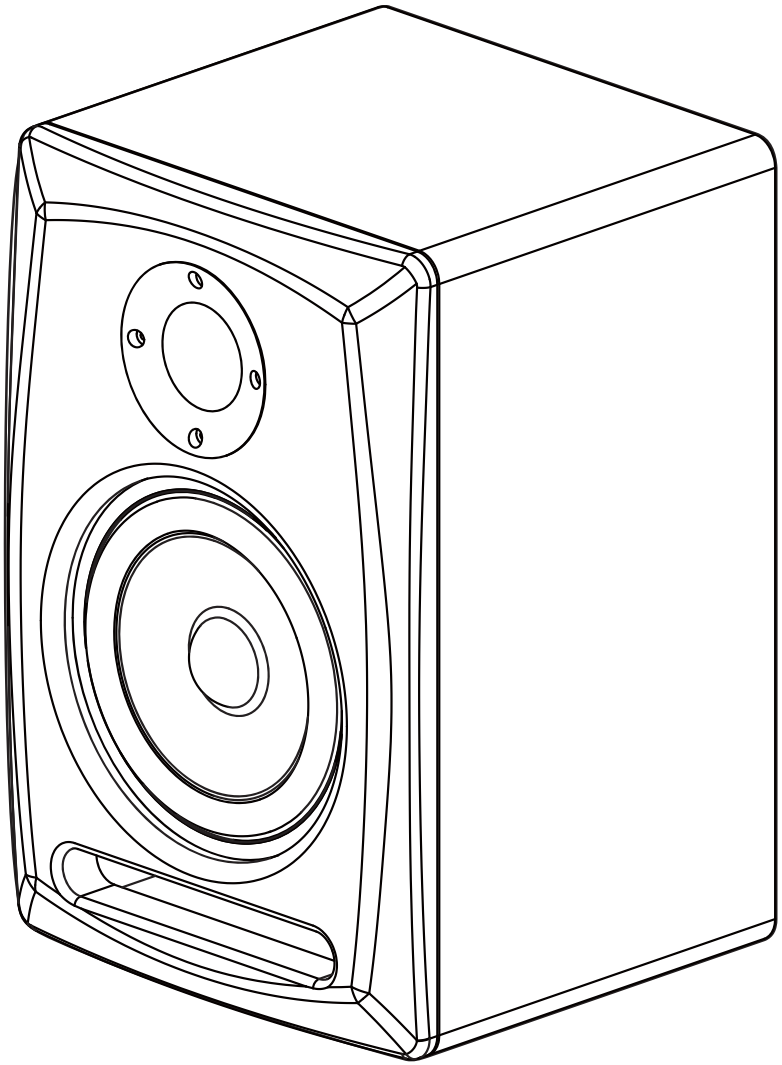
VOXOA

K50

Monitor Speaker



User Manual

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IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use the apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding- type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/ accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod, bracket or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lighting storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. When the mains plug or appliance coupler used as the disconnect device, it shall remain readily operable.
16. Please keep the unit in a good ventilation environment.

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION : To reduce the risk of electric shock, do not remove any cover. No user-serviceable parts inside. Refer servicing to qualified service personnel only.

The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the use to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying this appliance.

CAUTION

To prevent electric shock, do not use this polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

IMPORTANT SAFETY INSTRUCTIONS

17. All warnings on the appliance and in the operating instructions should be adhered to.
18. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
19 .Power Sources - This product should be operated only from the type of power source indicated on the rating label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer the operating instructions.
20. Grounding or Polarization - This product may be equipped with a polarized alternation-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
21. Power-Cord Protection - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to the cord in correspondence of plugs, convenience receptacles, and the point where they exit from the appliance.
22. For AC line powered units - Before returning repaired unit to user, use an ohm-meter to measure from both AC plug blades to all exposed metallic parts. The resistance should be more than 100,000 ohms.
23. Non-use Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
24. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
25. Damage Requiring Service - The appliance should be serviced by qualified service personnel when: A. The power-supply cord or the plug has been damaged; or B. Objects have fallen, or liquid has been spilled into the appliance; or C. The appliance has been exposed to rain; or D. The appliance does not appear to operate normally or exhibits a marked change in performance; or E. The appliance has been dropped, or the enclosure damaged.
26. Servicing - The user should not attempt any service to the appliance beyond that that described in the operating instructions. All other servicing should be referred to qualified service personnel.
27. Lightning - For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
28. Replacement Parts - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
29. Safety Check - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

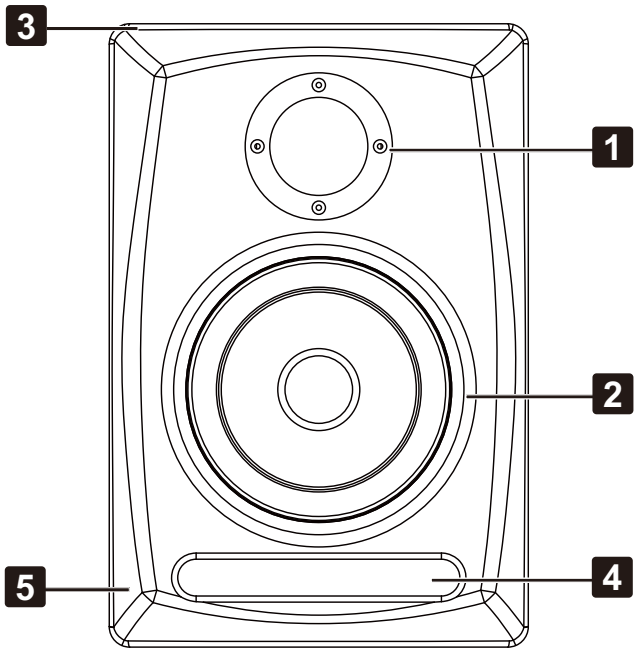
MAIN FEATURES

The VOXOA K50 monitors provide a smooth response that is accurate, and at the same time, pleasant to listen to.

Main features:

- Two-way, active studio monitor with ported, tuned enclosure, providing extremely accurate monitoring for recording studio, post-production and multi-media applications.
- The K50 Series employs woven carbon fiber, butyl surround woofers, and as a result, each monitor produces a tight and controlled low frequency response.
- 1.25-inch silk-dome tweeter with Ferro fluid cooled neodymium magnet, provides sweet and accurate high frequency response for the K50 series with low distortion.
- The K50 features active electronics including a Bi-Amp power amplifier with 50 watts of low frequency power and 25 watts for the high frequency power .
- Active crossover utilizing a multi-pole design for linear response from bottom to top.
- Interfacing the monitors to most any -10 or + 4dB signal source is quick and easy thanks to the K50 assortment of input connectors. The K50 has a balanced input on a TRS 1/4-inch jack and unbalanced input on an RCA jack.
- A/V shielded for multimedia applications providing clean operation near computer monitors.
- MDF (Medium Density Fiberboard) construction, extremely rigid, delivering maximum SPL.
- The K50 monitors fit in any decor and thanks to their black lacquer finished baffle, they provide an attractive enhancement to any control room.
- One-year extended warranty.

FRONT PANEL



1. 1.25–Inch Silk-Dome Tweeter

Silk-dome tweeter with Ferro fluid cooled neodymium magnet provides low distortion with a linear high frequency response resulting in a clear, precise and sweet top end.

2. Low Frequency Driver

Custom designed woven carbon fiber, copolymer butyl surround woofers providing each monitor with a tight and controlled low frequency response.

3. Enclosure

Rigid MDF construction.

4. Tuned Port

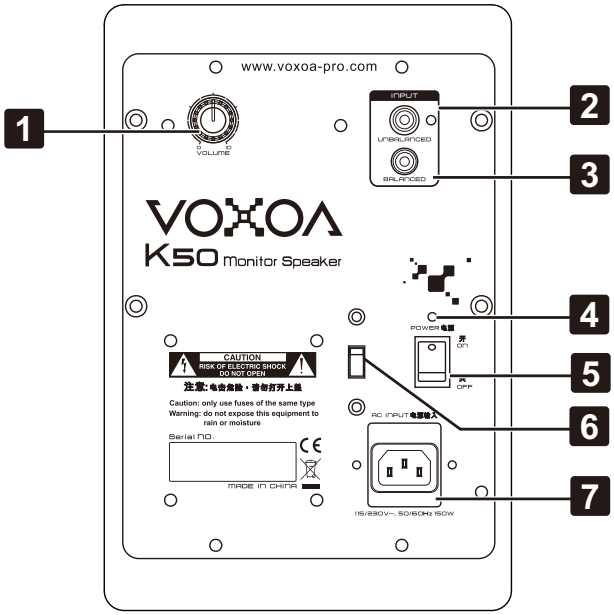
Quiet port design offering linear extended low frequency response.

5. Finish

Sleek black textured finish with gloss black baffle and titanium finished waveguide and trim ring.

PART NAMES AND FUNCTIONS

REAR PANEL



1. Volume

Controls the amount of output level.

2. RCA Input

Used to connect signals from unbalanced,–10dBV devices.

3. 1/4-Inch Input

Balance TRS (Tip, Ring, Sleeve) 1/4-inch plug used to connect balanced or unbalanced +4dBu line level signals.

4. Power LED

Green LED illuminates indicating the unit is powered on, ready for operation.

5. Power Switch

Main power switch.

6. Voltage Switch (115/230 V)

Used to select the operating voltage.

NOTE: Be sure to check the voltage setting is correct for your country.

7. AC Inlet

Connect the supplied IEC power cable here.

FEATURES

The K50 are self-powered, 2-way, near-field reference monitors, featuring robust power, advanced electronics and custom designed drive units. For pristine highs, the K50 boasts a 1.25-inch silk dome tweeter, set upon a custom designed waveguide.

The tweeter's voice coil is cooled with Ferro fluid and the use of an external heat sink adds to its increased power handling. The result is a wide, linear response producing high frequencies that are sweet, while clear and accurate.

For the low frequency response, the K50 employs proprietary low frequency woofers with woven carbon fiber cones, butyl surrounds and heavy duty motors. The woofers are well matched to the tuned enclosures and provide punchy and focused bass frequency response.

The monitors' crossovers have been carefully designed with high quality components insuring a linear frequency and phase response.

The K50 enclosures are constructed from MDF (Medium Density Fiberboard) and are finished in scuff resistant, vinyl covering with painted gloss black baffles.

The monitor's enclosures also include a tuned vent port that provides extended low-end response, and with a low turbulence design, the low frequency driver can move freely with minimal effect on the overall impedance.

On the rear of the enclosure, you'll find the K50 control panel, which features a variety of input connections including a 1/4-inch TRS balanced input and an RCA unbalanced input. These inputs are connected to K50 internal active crossover and bi-amp power module providing 50 watts of power for the low frequency woofer and 25 watts of power to the high frequency tweeter.

You will also find the pre-amp controls, Volume knob, used to adjust the overall level of the internal power amplifier. The K50 has been designed to provide flat, accurate monitoring.

POSITIONING THE K50

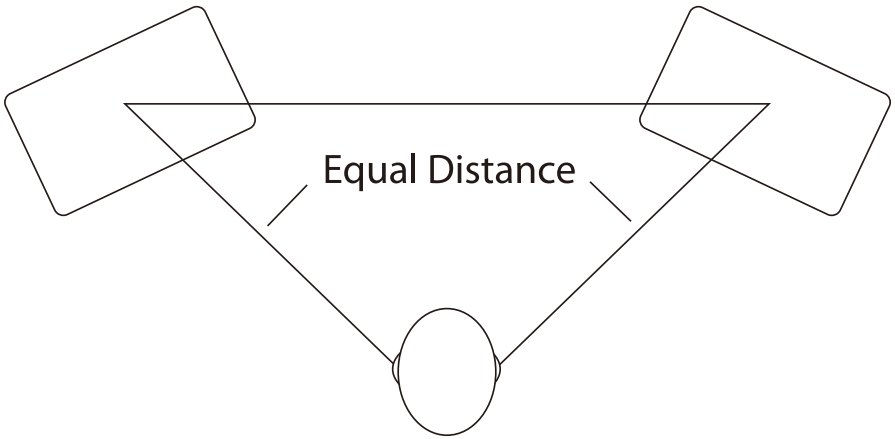
Near field monitoring has become the choice of many engineers in large and small studios because it minimizes the effect of room acoustics.

This is especially important in today's project studios since the budget for room acoustics is often close to nothing.

By positioning the reference monitors in the near field (close to the listeners), you can greatly reduce the effects of room acoustics. The most important considerations when evaluating the effects of room acoustics are reflective surfaces that are around the monitoring area. These can include flat tabletops, glass mirrors or framed pictures, large open walls and even the surface of your mixing console.

Mostly all reflecting sound will eventually reach the listening position, but since it is slightly delayed from the direct source, the result is random cancellation of some frequencies, or comb filtering. If possible, remove any and all reflective surfaces. You may also want to hang some acoustic foam on walls that are close to the monitors.

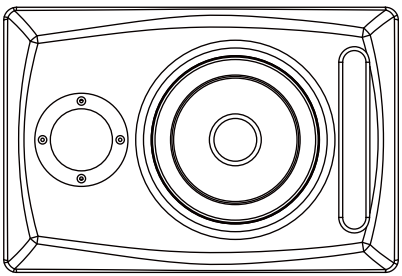
When positioning the monitors, you'll want to set up what is commonly referred to as the "mix triangle". In this ideal configuration, the space between the left and right monitor is equal to the distance from the listener to each monitor, forming an equilateral triangle.

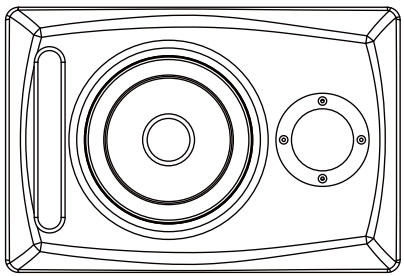


SETTING UP THE K50

Speaker Orientation

The K50 Series can be used in either the vertical or horizontal position, however for best results they should be set up in the vertical position. When using the monitors in the horizontal position, be certain to place the left and right side tweeters on the outer most sides. This will improve the stereo imaging and bass response by increasing the coupling of the low-end drivers.





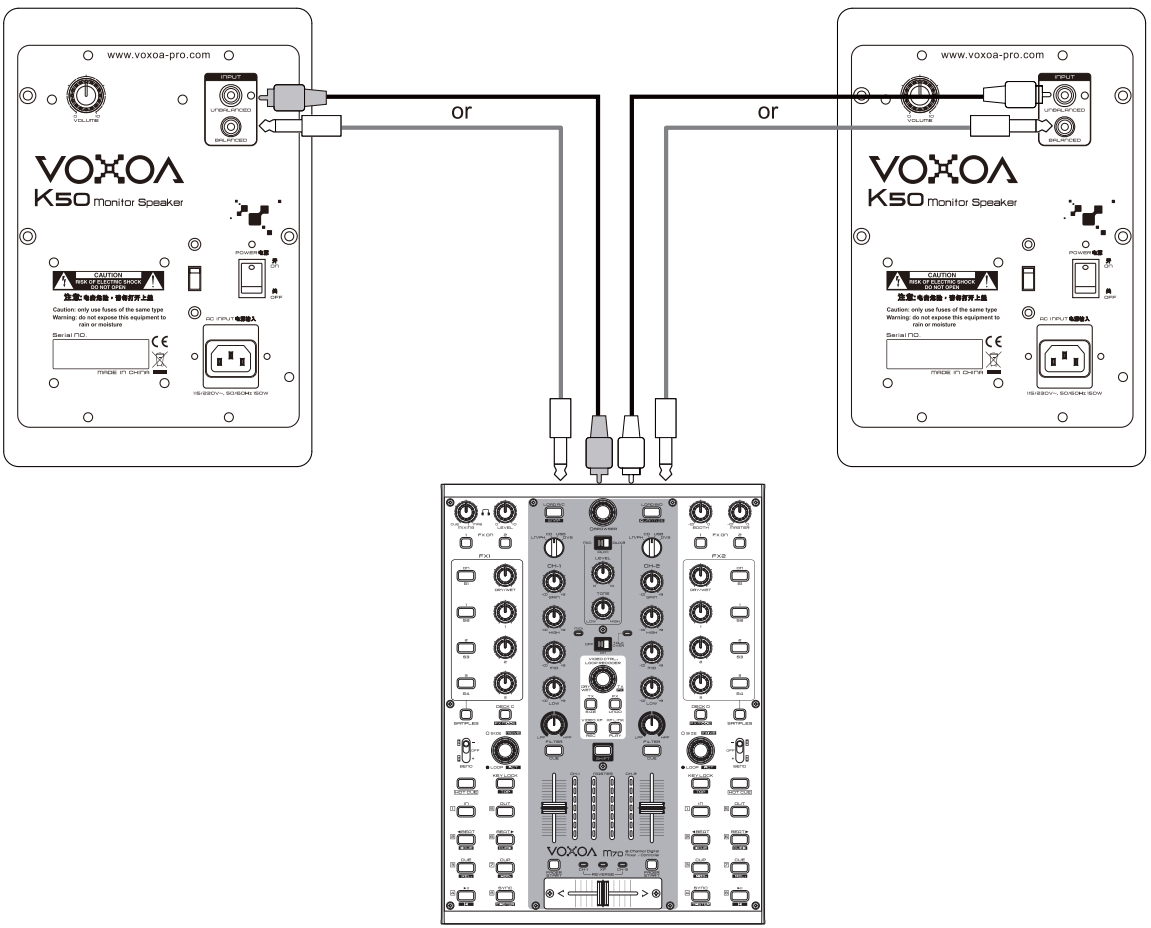
When choosing the height of your monitor system, be careful to avoid reflections off the surface of the mixing console. These reflections arrive at the listening position slightly delayed from the original sound resulting in strange cancellations and overall unpredictable response. Visualize straight lines representing the beams of sound radiating from the monitors and choose a height that reduces the occurrence of reflections that will end up in the prime listening spot. In most cases, the ideal position is slightly behind and above the mixing console's meter bridge.

Connecting the K50

- Lower your mixer's master outputs to all the way off.
- Connect the mixer's Left Control Room output to the left-side K50 LINE INPUT and the mixer's Right Control Room output to the right-side K50 LINE INPUT.
- Set the K50 input Volume control to the 2 o'clock position.
- Run an audio signal (like some music from a CD) through your mixer and raise the Control Room level to a comfortable listening level.

SETTING UP THE K50

NOTE: Before plugging in and turning on, remember the “last on, first off” rule of power amplifiers (and powered monitors). When powering up your system, be sure that all the wires are connected, turn your mixer and any other outboard gear on, and then last turn your K50 on. When powering down, turn your K50 off first and then your mixer and outboard gear.The K50 connections can be made via one of the two rear panel Audio Inputs. You can use RCA inputs for unbalanced -10dBV level signals, or either the 1/4-inch inputs for balanced, +4dBu level signals.Follow the simple steps and diagram below for a quick connection using a standard recording console’s control room outputs.



OPERATING THE K50

K50 Control Panel

The K50 rear control panels are where you will make your connections for both AC power and audio signals. The rear panel also contains the controls to make adjustments to the overall volume. The following section details the rear panel controls and connections.

1. Powering the K50

Since the K50 are active studio monitors with an on-board power amplifier and electronic crossover, it is necessary to connect the unit to an AC power supply. Make sure that the main Power switch is set to the OFF position and connect the supplied IEC power cable into the AC inlet.

2. Things that go Hum!

When running power cables, be careful not to run the AC power cords or AC extension cords in parallel to your input cables. This will help reduce any AC hum that can be picked up. If your have to cross an AC line with an audio line, try to cross them at a 90 degree angle for the least amount of induced hum. Using the K50 balanced input connectors will greatly protect against the induced hum thanks to the common mode rejection (the induced hum is phase canceled) that it's balanced input circuit provides.

3. Power Switch

The POWER switch is used to turn on the K50 active electronics. When set to the ON position, the LED will illuminate red, indicating the K50 is powered up and ready for operation.

4. AC Inlet

Connect the supplied IEC power cable here.

5. Volume Control

The volume control is used to adjust the overall output level of the K50 .When operating the unit for the first time, start with the volume control set all the way off. Slowly raise the Volume control to reach a comfortable listening level.

6. The Ins and The Outs

The K50 features a full complement of input connectors providing easy installation with a variety of audio devices like recording consoles, hard disk recorders,CD players and computer sound cards, to name a few. The following section details the K50 input connectors. In addition, there is a detailed cable-wiring diagram on page 12.

7. 1/4-Inch Audio Phono Input

A balanced TRS (Tip, Ring, Sleeve) 1/4-inch phono plug is used to connect balanced or unbalanced line level signals.

8. RCA Audio Input

The RCA input accepts unbalanced signals used to connect signals from unbalanced –10dBV devices.

SPECIFICATIONS

SPEAKER UINT

WOOFER : 5.25”, (133mm) Woven Carbon Fiber Woofer With Butyl Surround

TWEETER :1.25-inch (31.75mm) Silk Dome , Ferro-Fluid Cooled Tweeter

FREQUENCY RESPONSE : 70Hz - 20KHz

POWER RATING

LOW-FREQUENCY : 50 Watts RMS

HIGH-FREQUENCY : 25 Watts RMS

CROSSOVER FREQUENCY : 2.3KHz, multi-pole filter

INPUTS

UNBALANCED : -10dBV Line Level (CONNECTOR : RCA)

BALANCED : +4dBu Line Level (CONNECTOR : 1/4-inch Phone TRS, Tip Ring Sleeve)

ENCLOSURE

CONSTRUCTION : MDF (Medium Density Fiberboard)

FINISH : Black Textured Vinyl covering, painted gloss black baffle

DIMENSIONS : 188mm (W)x 288mm (H)x 215mm (D)

WEIGHT : 5.8 kg

NOTE

Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

www.voxoa-pro.com

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